

REMARKS

Status of the Claims

Claims 1-18 are currently pending and claims 1-3 are currently under consideration in this application, claims 4-18 having been withdrawn from consideration as allegedly being drawn to separate inventions. After entry of the amendments made herein, claims 1-19 will be pending and claims 1 and 19 will be under consideration in this application, claims 2 and 3 having been cancelled and claim 19 newly added. New claim 19 is supported by the specification, e.g., at page 3, lines 8-13, and adds no new matter.

35 U.S.C. §102(b) rejection

Claims 1 and 2 stand rejected as allegedly being anticipated by U.S. Patent No. 5,925,556 (the '556 patent) or U.S. Patent No. 6,066,492 (the '492 patent).

Applicants respectfully point out that, as the international filing date of the instant application was March 31, 2000, and the '492 patent was issued on May 23, 2000, the '492 patent is not 35 U.S.C. §102(b) prior art in regard to the instant application.

From the comments on page 3, line 19, to page 3, line 8, of the Office Action, Applicants understand the Examiner's position to be that the '556 and '492 patents teach degradation of polylactide resins by *Saccharothrix actinomycetes*. While not necessarily agreeing with this position, in order to expedite prosecution of the instant application, Applicants have amended claim 1 so as to incorporate the embodiments specified by claims 2 and 3 and have cancelled claims 2 and 3 without prejudice. No new matter is added by these amendments.

Applicants respectfully request that, in light of the above amendments, the rejection under 35 U.S.C. §102(b) be withdrawn.

35 U.S.C. §103(a) rejection

Claims 1-3 stand rejected as allegedly being unpatentable over the '556 patent, the '492 patent, JP 9-11-046755 (the '755 application), Williams, D.F., and the ATCC catalog. Applicants respectfully traverse this rejection.

From the comments on page 3, line 20, to page 6, line 16, of the Office Action, Applicants understand the Examiner's position to be that the lack of disclosure by the '556 and '492 patents of specific species of the *Saccharothrix* genus is compensated for by the other cited art and, as a result, the claims are rendered obvious by a combination of the cited art. Applicants disagree with this position.

Williams, the '775 application, and the ATCC catalog

Williams shows that an enzyme isolated from a single *Streptomyces* species (*S. griseus*) degraded a lactic acid polymer. The abstract of the '755 application discloses that a single species of *Actinimadura* (*A. viridis*) had such activity. There is no mention in either reference of *Saccharothrix* actinomycetes, let alone whether any species of *Streptomyces* and *Actinimadura* have been reclassified as a *Saccharothrix* actinomycete. Thus, neither reference contains the necessary motivation to combine its teaching with that of the section of the ATCC catalog indicating the reclassification of certain *Streptomyces* and *Actinimadura* species. This section of the ATCC catalog indicates that two members of the *Streptomyces* genus (*S. aerocolonigenes* and *S. capreolus*) and one member of the *Actinomadura* genus (*A. flava*) have been reclassified as *Saccharothrix* species. The reference makes no mention at all of lactic acid polymers, let alone degrading lactic acid polymers, and hence contains no motivation to combine its disclosure with that of Williams and/or the '755 application.

However, even if there were some motivation to combine the disclosures of the ATCC catalog, the '755 application, and Williams, doing so would not lead one of ordinary skill in the art to conclude that multiple *Saccharothrix* species degrade lactic acid polymers. Thus, Williams and the '755 application disclose the degradation of lactic acid polymers by an enzyme from a single species of *Streptomyces* and by a single species of *Actinomadura*, respectively. Neither reference discloses, or even suggests, that multiple species of *Streptomyces* and *Actinimadura* genera degrade lactic acid polymers. The fact that one species of a microbial genus displays an activity of interest is by no means an indication that all, or even multiple, species of that genus possess that activity. Importantly in this regard, an article published subsequent to the priority date of the instant application (Jareřat et al. (2002) Macromol. Biosci. 2:420-428; copy enclosed as Exhibit A) showed that three strains of *Streptomyces* (*S. setae*, *S. thermodiastaticus*, and *S.*

megasporus) and one strain of *Actinomadura* (*A. madurae*) did not degrade poly-lactic acid (Figure 1).

Moreover, the cited section of the ATCC catalog does not disclose or even mention whether *S. griseus* and/or *A. viridis*, let alone multiple species of the *Streptomyces* and *Actinimadura* genera, have been reclassified as *Saccharothrix* actinomycetes.

Thus, even if one or more of these three references contained the requisite motivation to combine their respective disclosures, the resulting combination would not teach that multiple *Saccharothrix* species degrade lactic acid polymers.

The '556 and '492 patents and the ATCC catalog

The cited art does not provide the necessary motivation to combine the listing of various *Saccharothrix* species in the ATCC catalog with the disclosure of the '556 and 492 patents and thereby disclose the degradation of polylactide resins by the species of *Saccharothrix* listed in the ATCC catalog.

Thus, in that the section of the ATCC catalog containing the listing of *Saccharothrix* species makes no mention of lactic acid polymers, let alone degrading lactic acid polymers, the catalog section contains no motivation to combine the listing with the disclosure of the '556 and '492 patents. In addition, in that the '566 and '492 patents do not disclose, or even suggest, that multiple species of *Saccharothrix* would be useful for degrading lactic acid resins, they do not contain the motivation to combine their disclosure with that of the listing of *Saccharothrix* species in the ATCC catalog. Moreover, a hypothetical combination of Williams, the '775 patent, and the section of the ATCC catalog referring to reclassification of *Streptomyces* and *Actinimadura* species, would not provide such motivation because, for the reasons given above, it would not teach one of ordinary skill in the art that multiple species of *Saccharothrix* degrade lactic acid polymers.

In light of the above considerations, Applicants respectfully submit that the cited art does not render the instant claims obvious and thus request that the rejection under 35 U.S.C. §103(a) be withdrawn.

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US

CONCLUSION

In summary, for the reasons set forth above, Applicants maintain that the pending claims patentably define the invention. Applicants request that the Examiner reconsider the rejections as set forth in the Office Action, and permit the pending claims to pass to allowance.

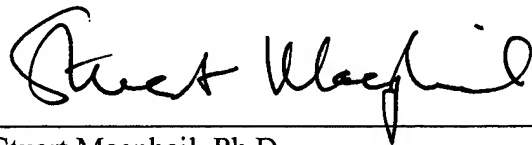
If the Examiner would like to discuss any of the issues raised in the Office Action, Applicants' undersigned representative can be reached at the telephone number listed above.

Applicants submit herewith a request for an automatic extension of time and a check in payment of the extension of time. Please apply any other charges or credits to Deposit Account No. 06-1050, referencing Attorney Docket No. 11283-018US1.

Respectfully submitted,

Date: _____

12/12/03



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